GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

LOK SABHA UNSTARRED QUESTION NO. 1721 TO BE ANSWERED ON 30.07.2025

GREEN RAILWAYS

1721 SHRI NAVEEN JINDAL:

Will the Minister of RAILWAYS be pleased to state:

- (a) the details of the key green initiatives undertaken by the Government to reduce the carbon footprint of Indian Railways;
- (b) the manner in which the Government is ensuring adherence to environmental regulations in large- scale infrastructure projects;
- (c) the details of the efforts undertaken by the Government in ensuring adherence to environmental regulations to achieve Green Railways by 2030; and
- (d) the details of the total installed capacity of renewable energy in the calendar year 2025?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY (SHRI ASHWINI VAISHNAW)

(a) to (d) Indian Railways is committed to implementing the green initiatives to reduce its carbon footprint through following efforts:

 About 99% of the total Broad Gauge (BG) network of Indian Railways has been electrified. Electrification carried out during 2014-25 and before 2014 is as under:

Period	Route Kilometer
Before 2014 (about 60 years)	21,801
During 2014-25	46,900

- 2. Around 660 Mega Watt (MW) of solar plants (both on Rooftops and on land) and 103 MW of Wind based power plants has been commissioned so far. Further, 100 MW Renewable Energy power under Round the Clock (RE-RTC) mode, tied up with Solar Energy Corporation of India (SECI) has also started flowing. In addition to this, 1500 MW capacity of power in RE-RTC mode has been tied up.
- 3. In the calendar year 2025, till June, about 181 MW of solar power plant has been installed.
- 4. Indian Railways has taken up a project of running its first Hydrogen powered train. This train will be the world's most powerful hydrogen train, with power of 2400 kW and a 10 coaches' configuration.
- 5. Introduction of 3-phase propulsion system with regenerative braking.
- Conversion of End on Generation (EOG) trains into Head on Generation (HOG) trains to reduce diesel consumption, air and noise pollution.

- 7. Provision of energy efficient Light Emitting Diode (LED) lighting in all Railway installations including stations, service buildings, residential quarters and coaches for reduction in electricity consumption.
- 8. Use of star rated appliances.
- 9. Green Certifications & Environment Management System
 Certifications of industrial units, railway stations and other
 railway establishments.
- 10. Afforestation to absorb carbon emissions and combat climate change.
- 11. System for effective waste management, including disposal, of waste generated at Railway stations, catering units and coaches in place.
